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=> file bioscience chemistry agriculture

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=> s ?conotoxin? (s) refold? and (detergent or surfactant? or non-ionic (w) detergent? or  
tween-20 or tweem-80 or triton?) and disulfide?

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L1 0 FILE ADISCTI

LEFT TRUNCATION IGNORED FOR '?CONOTOXIN?' FOR FILE 'ADISINSIGHT'

L2 0 FILE ADISINSIGHT

LEFT TRUNCATION IGNORED FOR '?CONOTOXIN?' FOR FILE 'ADISNEWS'

L3 0 FILE ADISNEWS

LEFT TRUNCATION IGNORED FOR '?CONOTOXIN?' FOR FILE 'AGRICOLA'

L4 0 FILE AGRICOLA

L5 0 FILE ANABSTR

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L7 0 FILE BIOBUSINESS

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L8 0 FILE BIOCOMMERCE

L9 0 FILE BIOSIS

LEFT TRUNCATION IGNORED FOR '?CONOTOXIN?' FOR FILE 'BIOTECHDS'

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L11 0 FILE BIOTECHNO

L12 0 FILE CABA

L13 0 FILE CANCERLIT

L14 0 FILE CAPLUS

LEFT TRUNCATION IGNORED FOR '?CONOTOXIN?' FOR FILE 'CEABA-VTB'

L15           0 FILE CEABA-VTB  
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 L16           0 FILE CEN  
 L17           0 FILE CIN  
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 L20           0 FILE CROPU  
 L21           0 FILE DISSABS  
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 L22           0 FILE DGENE  
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 L23           0 FILE DRUGB  
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 L24           0 FILE DRUGMONOG2  
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 L33           0 FILE FOREGE  
 L34           0 FILE FROSTI  
 L35           0 FILE FSTA  
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 L37           0 FILE HEALSAFE  
 L38           0 FILE IFIPAT  
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 L40           0 FILE JICST-EPLUS  
 L41           0 FILE KOSMET  
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 L45           0 FILE NIOSHTIC  
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L56 0 FILE RDISCLOSURE  
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L60 0 FILE USPATFULL  
L61 0 FILE USPAT2  
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L64 0 FILE WPIDS  
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L71 0 FILE CERAB  
L72 0 FILE COMPENDEX  
L73 0 FILE COPPERLIT  
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L80 0 FILE METADEX  
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L85 0 FILE STANDARDS  
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L87 0 FILE TULSA2  
L88 0 FILE USAN  
L89 0 FILE WELDASEARCH  
L90 0 FILE WSCA

TOTAL FOR ALL FILES

L91 0 ?CONOTOXIN? (S) REFOLD? AND (DETERGENT OR SURFACTANT? OR NON-ION  
IC (W) DETERGENT? OR TWEEN-20 OR TWEEM-80 OR TRITON?) AND DISULF  
IDE?

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=> s ?CONOTOXIN? (S) ?FOLD? AND (DETERGENT OR SURFACTANT? OR NON-IONIC (W) DETERGENT? OR  
TWEEN-20 OR TWEEM-80 OR TRITON?) AND DISULFIDE?

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LEFT TRUNCATION IGNORED FOR '?FOLD?' FOR FILE 'ADISCTI'

L92 0 FILE ADISCTI

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L95 0 FILE AGRICOLA

L96 0 FILE ANABSTR

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L97 0 FILE AQUASCI

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L99 0 FILE BIOCOMMERCE

L100 1 FILE BIOSIS

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LEFT TRUNCATION IGNORED FOR '?FOLD?' FOR FILE 'BIOTECHDS'

L101 0 FILE BIOTECHDS

L102 0 FILE BIOTECHNO

L103 0 FILE CABA

L104 0 FILE CANCERLIT

L105 1 FILE CAPLUS

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LEFT TRUNCATION IGNORED FOR '?FOLD?' FOR FILE 'CEN'

L107 0 FILE CEN

L108 0 FILE CIN

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L109 0 FILE CONFSCI

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L110 0 FILE CROPB

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L111 0 FILE CROPU

L112 0 FILE DISSABS

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L113 0 FILE DGENE

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L114 0 FILE DRUGB

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L115 0 FILE DRUGMONOG2

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L116 0 FILE IMSDRUGNEWS

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L127 0 FILE GENBANK  
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 L172 0 FILE NAPRALERT  
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 L174 0 FILE RAPRA  
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 L176 0 FILE STANDARDS  
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 L179 0 FILE USAN

L180 0 FILE WELDASEARCH  
L181 0 FILE WSCA

TOTAL FOR ALL FILES

L182 25 ?CONOTOXIN? (S) ?FOLD? AND (DETERGENT OR SURFACTANT? OR NON-IONIC (W) DETERGENT? OR TWEEN-20 OR TWEEM-80 OR TRITON?) AND DISULFIDE?

Left truncation is not valid in the specified search field in the specified file. The term has been searched without left truncation. Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID' would be searched as 'FLAVONOID.'

If you are searching in a field that uses implied proximity, and you used a truncation symbol after a punctuation mark, the system may interpret the truncation symbol as being at the beginning of a term. Implied proximity is used in search fields indexed as single words, for example, the Basic Index.

=> d l182 1-25 ibib abs

L182 ANSWER 1 OF 25 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2003:202756 BIOSIS

DOCUMENT NUMBER: PREV200300202756

TITLE: **Detergent-assisted oxidative folding of delta-conotoxins.**

AUTHOR(S): dela Cruz, R.; Whitby, F. G.; Buczek, O.; Bulaj, G.  
[Reprint Author]

CORPORATE SOURCE: University of Utah, Salt Lake City, UT, 84112, USA

SOURCE: Journal of Peptide Research, (April 2003) Vol. 61, No. 4, pp. 202-212. print.  
ISSN: 1397-002X (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 23 Apr 2003

Last Updated on STN: 23 Apr 2003

AB Conotoxins comprise a diverse group of **disulfide**-rich peptides found in venoms of predatory Conus species. The native conformation of these peptides is marginally stable in comparison with alternative conformations, often resulting in low folding yields. The oxidative **folding** of hydrophobic delta-**conotoxins** was found to produce less than 1% of the native peptide (Bulaj, G. et al. (2001) Biochemistry 40, 13201). In order to identify factors that might improve **folding** yields, we screened a number of additives including water-soluble polymers, **detergents** and osmolytes for their ability to increase steady-state accumulation of the native delta-**conotoxin** PVIA. The presence of a **non-ionic detergent** Tween and low temperature appeared to be the most effective factors in improving the oxidative folding. The **detergent** was also effective in promoting **folding** of other hydrophobic delta-**conotoxins**. Based on our findings, we discuss a possible mechanism for **detergent**-assisted folding and the general applicability of this mechanism to facilitating the proper folding of hydrophobic, cysteine-rich peptides.

L182 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:237390 CAPLUS

DOCUMENT NUMBER: 139:175022

TITLE: **Detergent-assisted oxidative folding of delta-conotoxins**

AUTHOR(S): DeLa Cruz, R.; Whitby, F. G.; Buczek, O.; Bulaj, G.

CORPORATE SOURCE: Department of Biology, University of Utah, Salt Lake City, UT, 84112, USA

SOURCE: Journal of Peptide Research (2003), 61(4), 202-212  
CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER: Blackwell Munksgaard

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Conotoxins comprise a diverse group of **disulfide**-rich peptides found in venoms of predatory Conus species. The native conformation of these peptides is marginally stable in comparison with alternative conformations, often resulting in low folding yields. The oxidative **folding** of hydrophobic  $\delta$ - **conotoxins** was found to produce less than 1% of the native peptide [Bulaj, G. et al. (2001) Biochem. 40, 13201]. In order to identify factors that might improve **folding** yields, the authors screened a number of additives including water-soluble polymers, **detergents** and osmolytes for their ability to increase steady-state accumulation of the native  $\delta$ -**conotoxin** PVIA. The presence of a **non-ionic detergent** Tween and low temperature appeared to be the most effective factors in improving the oxidative folding. The **detergent** was also effective in promoting **folding** of other hydrophobic  $\delta$ - **conotoxins**. Based on our findings, the authors discuss a possible mechanism for **detergent**-assisted folding and the general applicability of this mechanism to facilitating the proper folding of hydrophobic, cysteine-rich peptides.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L182 ANSWER 3 OF 25 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 2003130601 EMBASE  
TITLE: **Detergent**-assisted oxidative **folding** of  $\delta$ - **conotoxins**.  
AUTHOR: DeLa Cruz R.; Whitby F.G.; Buczek O.; Bulaj G.  
CORPORATE SOURCE: G. Bulaj, University of Utah, Salt Lake City, UT 84112, United States  
SOURCE: Journal of Peptide Research, (1 Apr 2003) 61/4 (202-212).  
Refs: 46  
ISSN: 1397-002X CODEN: JPERFA  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 029 Clinical Biochemistry  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB **Conotoxins** comprise a diverse group of **disulfide**-rich peptides found in venoms of predatory Conus species. The native conformation of these peptides is marginally stable in comparison with alternative conformations, often resulting in low **folding** yields. The oxidative **folding** of hydrophobic  $\delta$ -**conotoxins** was found to produce less than 1% of the native peptide [Bulaj, G. et al. (2001) Biochemistry 40, 13201]. In order to identify factors that might improve **folding** yields, we screened a number of additives including water-soluble polymers, **detergents** and osmolytes for their ability to increase steady-state accumulation of the native  $\delta$ - **conotoxin** PVIA. The presence of a **non-ionic detergent** Tween and low temperature appeared to be the most effective factors in improving the oxidative **folding**. The **detergent** was also effective in promoting **folding** of other hydrophobic  $\delta$ - **conotoxins**. Based on our findings, we discuss a possible mechanism for **detergent**-assisted **folding** and the general applicability of this mechanism to facilitating the proper **folding** of hydrophobic, cysteine-rich peptides.

L182 ANSWER 4 OF 25 Elsevier BIOBASE COPYRIGHT 2004 Elsevier Science B.V. on STN

ACCESSION NUMBER: 2003080944 ESBIOBASE  
TITLE: **Detergent**-assisted oxidative **folding** of  $\delta$ - **conotoxins**  
AUTHOR: DeLa Cruz R.; Whitby F.G.; Buczek O.; Bulaj G.  
CORPORATE SOURCE: G. Bulaj, University of Utah, Salt Lake City, UT 84112, United States.

SOURCE: Journal of Peptide Research, (01 APR 2003), 61/4  
(202-212), 46 reference(s)  
CODEN: JPERFA ISSN: 1397-002X  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United Kingdom  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB **Conotoxins** comprise a diverse group of **disulfide**-rich peptides found in venoms of predatory *Conus* species. The native conformation of these peptides is marginally stable in comparison with alternative conformations, often resulting in low **folding** yields. The oxidative **folding** of hydrophobic  $\delta$ -**conotoxins** was found to produce less than 1% of the native peptide [Bulaj, G. et al. (2001) *Biochemistry* 40, 13201]. In order to identify factors that might improve **folding** yields, we screened a number of additives including water-soluble polymers, **detergents** and osmolytes for their ability to increase steady-state accumulation of the native  $\delta$ - **conotoxin** PVIA. The presence of a **non-ionic detergent** Tween and low temperature appeared to be the most effective factors in improving the oxidative **folding**. The **detergent** was also effective in promoting **folding** of other hydrophobic  $\delta$ - **conotoxins**. Based on our findings, we discuss a possible mechanism for **detergent**-assisted **folding** and the general applicability of this mechanism to facilitating the proper **folding** of hydrophobic, cysteine-rich peptides.

L182 ANSWER 5 OF 25 MEDLINE on STN

ACCESSION NUMBER: 2003095049 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 12605605  
TITLE: **Detergent**-assisted oxidative **folding** of delta-**conotoxins**.  
AUTHOR: DeLa Cruz R; Whitby F G; Buczek O; Bulaj G  
CORPORATE SOURCE: Department of Biology, University of Utah, Salt Lake City, Utah 84112, USA.  
CONTRACT NUMBER: GM 42494 (NIGMS)  
PO 148677

SOURCE: journal of peptide research : official journal of the American Peptide Society, (2003 Apr) 61 (4) 202-12.  
Journal code: 9707067. ISSN: 1397-002X.

PUB. COUNTRY: Denmark  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200311  
ENTRY DATE: Entered STN: 20030228  
Last Updated on STN: 20031217  
Entered Medline: 20031126

AB **Conotoxins** comprise a diverse group of **disulfide**-rich peptides found in venoms of predatory *Conus* species. The native conformation of these peptides is marginally stable in comparison with alternative conformations, often resulting in low folding yields. The oxidative **folding** of hydrophobic delta-**conotoxins** was found to produce less than 1% of the native peptide [Bulaj, G. et al. (2001) *Biochemistry* 40, 13201]. In order to identify factors that might improve **folding** yields, we screened a number of additives including water-soluble polymers, **detergents** and osmolytes for their ability to increase steady-state accumulation of the native delta-**conotoxin** PVIA. The presence of a **non-ionic detergent** Tween and low temperature appeared to be the most effective factors in improving the oxidative folding. The **detergent** was also effective in promoting **folding** of other hydrophobic delta-**conotoxins**. Based on our findings, we discuss a possible mechanism for **detergent**-assisted folding and the general applicability of this mechanism to facilitating the proper folding of hydrophobic, cysteine-rich peptides.

L182 ANSWER 6 OF 25 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN  
 ACCESSION NUMBER: 2003:259701 SCISEARCH  
 THE GENUINE ARTICLE: 656MX  
 TITLE: **Detergent-assisted oxidative folding of delta-conotoxins**  
 AUTHOR: DeLa Cruz R; Whitby F G; Buczek O; Bulaj G (Reprint)  
 CORPORATE SOURCE: Univ Utah, Dept Biol, Salt Lake City, UT 84112 USA (Reprint); Univ Utah, Sch Med, Dept Biochem, Salt Lake City, UT 84132 USA  
 COUNTRY OF AUTHOR: USA  
 SOURCE: JOURNAL OF PEPTIDE RESEARCH, (APR 2002) Vol. 61, No. 4, pp. 202-212.  
 Publisher: BLACKWELL MUNKSGAARD, 35 NORRE SOGADE, PO BOX 2148, DK-1016 COPENHAGEN, DENMARK.  
 ISSN: 1397-002X.  
 DOCUMENT TYPE: Article; Journal  
 LANGUAGE: English  
 REFERENCE COUNT: 46

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB **Conotoxins** comprise a diverse group of **disulfide**-rich peptides found in venoms of predatory *Conus* species. The native conformation of these peptides is marginally stable in comparison with alternative conformations, often resulting in low **folding** yields. The oxidative **folding** of hydrophobic delta-**conotoxins** was found to produce less than 1 % of the native peptide [Bulaj, G. et al. (2001) *Biochemistry* 40, 13201]. In order to identify factors that might improve **folding** yields, we screened a number of additives including water-soluble polymers, **detergents** and osmolytes for their ability to increase steady-state accumulation of the native delta-**conotoxin** PVIA. The presence of a **non-ionic detergent** Tween and low temperature appeared to be the most effective factors in improving the oxidative **folding**. The **detergent** was also effective in promoting **folding** of other hydrophobic delta-**conotoxins**. Based on our findings, we discuss a possible mechanism for **detergent-assisted folding** and the general applicability of this mechanism to facilitating the proper **folding** of hydrophobic, cysteine-rich peptides.

L182 ANSWER 7 OF 25 TOXCENTER COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:76151 TOXCENTER  
 COPYRIGHT: Copyright 2004 ACS  
 DOCUMENT NUMBER: CA13912175022Z  
 TITLE: **Detergent-assisted oxidative folding of  $\delta$ -conotoxins**  
 AUTHOR(S): DeLa Cruz, R.; Whitby, F. G.; Buczek, O.; Bulaj, G.  
 CORPORATE SOURCE: Department of Biology, University of Utah, Salt Lake City, UT, 84112, USA.  
 SOURCE: Journal of Peptide Research, (2003) Vol. 61, No. 4, pp. 202-212.  
 CODEN: JPERFA. ISSN: 1397-002X.  
 COUNTRY: UNITED STATES  
 DOCUMENT TYPE: Journal  
 FILE SEGMENT: CAPLUS  
 OTHER SOURCE: CAPLUS 2003:237390  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 20030401  
 Last Updated on STN: 20030916

AB **Conotoxins** comprise a diverse group of **disulfide**-rich peptides found in venoms of predatory *Conus* species. The native conformation of these peptides is marginally stable in comparison with alternative conformations, often resulting in low folding yields. The oxidative **folding** of hydrophobic  $\delta$ -**conotoxins** was found to produce less than 1% of the native peptide [Bulaj, G. et al. (2001) *Biochem.* 40, 13201]. In order to identify factors that might improve

**folding** yields, the authors screened a number of additives including water-soluble polymers, **detergents** and osmolytes for their ability to increase steady-state accumulation of the native  $\delta$ -**conotoxin** PVIA. The presence of a **non-ionic detergent** Tween and low temperature appeared to be the most effective factors in improving the oxidative folding. The **detergent** was also effective in promoting **folding** of other hydrophobic  $\delta$ - **conotoxins**. Based on our findings, the authors discuss a possible mechanism for **detergent**-assisted folding and the general applicability of this mechanism to facilitating the proper folding of hydrophobic, cysteine-rich peptides.

L182 ANSWER 8 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:31067 USPATFULL

TITLE: Method of recovering a nucleic acid encoding a proteinaceous binding domain which binds a target material

INVENTOR(S): Ladner, Robert Charles, Ijamsville, MD, UNITED STATES  
Guterman, Sonia Kosow, Belmont, MA, UNITED STATES  
Roberts, Bruce Lindsay, Milford, MA, UNITED STATES  
Markland, William, Milford, MA, UNITED STATES  
Ley, Arthur Charles, Newton, MA, UNITED STATES  
Kent, Rachel Baribault, Boxborough, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004023205	A1	20040205
APPLICATION INFO.:	US 2002-126544	A1	20020422 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-993776, filed on 18 Dec 1997, ABANDONED Continuation of Ser. No. US 1995-415922, filed on 3 Apr 1995, GRANTED, Pat. No. US 5837500 Continuation of Ser. No. US 1993-9319, filed on 26 Jan 1993, GRANTED, Pat. No. US 5403484 Division of Ser. No. US 1991-664989, filed on 1 Mar 1991, GRANTED, Pat. No. US 5223409 Continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, ABANDONED Continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1989-US3731	19890901
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BROWDY AND NEIMARK, P.L.L.C., 624 Ninth Street, N.W., Washington, DC, 20001	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Page(s)	
LINE COUNT:	15868	

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III

protein.

L182 ANSWER 9 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:7306 USPATFULL  
TITLE: Nucleic acids, genetic constructs, and library of  
nucleic acids encoding fusion proteins  
INVENTOR(S): Ladner, Robert Charles, Ijamsville, MD, UNITED STATES  
Guterman, Sonia Kosow, Belmont, MA, UNITED STATES  
Roberts, Bruce Lindsay, Milford, MA, UNITED STATES  
Markland, William, Milford, MA, UNITED STATES  
Ley, Arthur Charles, Newton, MA, UNITED STATES  
Kent, Rachel Baribault, Boxborough, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004005539	A1	20040108
APPLICATION INFO.:	US 2002-127028	A1	20020422 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-993776, filed on 18 Dec 1997, ABANDONED Continuation of Ser. No. US 1995-415922, filed on 3 Apr 1995, GRANTED, Pat. No. US 5837500 Continuation of Ser. No. US 1993-9319, filed on 26 Jan 1993, GRANTED, Pat. No. US 5403484 Division of Ser. No. US 1991-664989, filed on 1 Mar 1991, GRANTED, Pat. No. US 5223409 Continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, ABANDONED Continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1989-US3731	19890901
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BROWDY AND NEIMARK, P.L.L.C., 624 Ninth Street, N.W., Washington, DC, 20001	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Page(s)	
LINE COUNT:	16057	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 10 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2003:318635 USPATFULL  
TITLE: Novel nucleic acids and polypeptides  
INVENTOR(S): Tang, Y. Tom, San Jose, CA, UNITED STATES  
Yang, Yonghong, San Jose, CA, UNITED STATES



Wang, Zhiwei, Sunnyvale, CA, UNITED STATES  
Weng, Gezhi, Piedmont, CA, UNITED STATES  
Ma, Yunqing, Santa Clara, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003224379	A1	20031204
APPLICATION INFO.:	US 2002-243552	A1	20020912 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2000-US35017, filed on 22 Dec 2000, PENDING Continuation-in-part of Ser. No. US 2000-552317, filed on 25 Apr 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-488725, filed on 21 Jan 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 2001-US2623	20010125
	WO 2001-US3800	20010205
	WO 2001-US4927	20010226
	WO 2001-US4941	20010305
	WO 2001-US8631	20010330
	WO 2001-US8656	20010416
	WO 2001-US14827	20010516
	US 2001-322511P	20010913 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Elena Quertermous, 675 Almanor Avenue, Sunnyvale, CA, 94085	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
LINE COUNT:	13810	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
AB	The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 11 OF 25 USPATFULL on STN  
ACCESSION NUMBER: 2003:312289 USPATFULL  
TITLE: Directed evolution of novel binding proteins  
INVENTOR(S): Ladner, Robert Charles, Ijamsville, MD, UNITED STATES  
Guterman, Sonia Kosow, Belmont, MA, UNITED STATES  
Roberts, Bruce Lindsay, Milford, MA, UNITED STATES  
Markland, William, Milford, MA, UNITED STATES  
Ley, Arthur Charles, Newton, MA, UNITED STATES  
Kent, Rachel Baribault, Boxborough, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003219886	A1	20031127
APPLICATION INFO.:	US 2001-896095	A1	20010629 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-993776, filed on 18 Dec 1997, PENDING Continuation of Ser. No. US 1995-415922, filed on 3 Apr 1995, GRANTED, Pat. No. US 5837500 Continuation of Ser. No. US 1993-9319, filed on 26 Jan 1993, GRANTED, Pat. No. US 5403484 Division of Ser. No. US 1991-664989, filed on 1 Mar 1991, GRANTED, Pat. No. US 5223409 Continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, ABANDONED Continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1989-US3731	19890901
DOCUMENT TYPE:	Utility	

FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: BROWDY AND NEIMARK, P.L.L.C., 624 Ninth Street, N.W.,  
Washington, DC, 20001  
NUMBER OF CLAIMS: 100  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 16 Drawing Page(s)  
LINE COUNT: 15529  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 12 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2003:312125 USPATFULL  
TITLE: Fusion proteins, modified filamentous bacteriophage,  
and populations or libraries of same  
INVENTOR(S): Ladner, Robert Charles, Ijamsville, MD, UNITED STATES  
Guterman, Sonia Kosow, Belmont, MA, UNITED STATES  
Roberts, Bruce Lindsay, Milford, MA, UNITED STATES  
Markland, William, Milford, MA, UNITED STATES  
Ley, Arthur Charles, Newton, MA, UNITED STATES  
Kent, Rachel Baribault, Boxborough, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003219722	A1	20031127
APPLICATION INFO.:	US 2002-126685	A1	20020422 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-993776, filed on 18 Dec 1997, PENDING Continuation of Ser. No. US 1995-415922, filed on 3 Apr 1995, GRANTED, Pat. No. US 5837500 Continuation of Ser. No. US 1993-9319, filed on 26 Jan 1993, GRANTED, Pat. No. US 5403484 Division of Ser. No. US 1991-664989, filed on 1 Mar 1991, GRANTED, Pat. No. US 5223409 Continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, ABANDONED Continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1989-US3731	19890901
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BROWDY AND NEIMARK, P.L.L.C., 624 Ninth Street, N.W., Washington, DC, 20001	
NUMBER OF CLAIMS:	38	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Page(s)	
LINE COUNT:	16459	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 13 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2003:165862 USPATFULL  
TITLE: Directed evolution of novel binding proteins  
INVENTOR(S): Ladner, Robert Charles, Ijamsville, MD, UNITED STATES  
Guterman, Sonia Kosow, Belmont, MA, UNITED STATES  
Roberts, Bruce Lindsay, Milford, MA, UNITED STATES  
Markland, William, Milford, MA, UNITED STATES  
Ley, Arthur Charles, Newton, MA, UNITED STATES  
Kent, Rachel Baribault, Boxborough, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003113717	A1	20030619
APPLICATION INFO.:	US 2001-893878	A1	20010629 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-993776, filed on 18 Dec 1997, PENDING Continuation of Ser. No. US 1995-415922, filed on 3 Apr 1995, PATENTED Continuation of Ser. No. US 1993-9319, filed on 26 Jan 1993, PATENTED Division of Ser. No. US 1991-664989, filed on 1 Mar 1991, PATENTED Continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, ABANDONED Continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1989-US3731	19890901
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BROWDY AND NEIMARK, P.L.L.C., 624 Ninth Street, N.W., Washington, DC, 20001	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Page(s)	
LINE COUNT:	15933	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural-signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used

as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 14 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2002:273335 USPATFULL  
 TITLE: Agouti polynucleotide compositions and methods of use  
 INVENTOR(S): Woychik, Richard P., Orinda, CA, UNITED STATES  
 Bultman, Scott J., Lakewood, OH, UNITED STATES  
 Michaud, Edward J., UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151463	A1	20021017
	US 6514747	B2	20030204
APPLICATION INFO.:	US 2001-781811	A1	20010212 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-34088, filed on 3 Mar 1998, GRANTED, Pat. No. US 6310034 Continuation-in-part of Ser. No. US 1993-64385, filed on 21 May 1993, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	GREGORY A. NELSON, AKERMAN, SENTERFITT AND EIDSON, P.A., 222 LAKEVIEW AVENUE, SUITE 400, P.O.BOX 3188, WEST PALM BEACH, FL, 33402-3188		
NUMBER OF CLAIMS:	50		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	41 Drawing Page(s)		
LINE COUNT:	11146		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods and compositions comprising novel agouti polypeptides and the polynucleotides which encode them. Also disclosed are DNA segments encoding these proteins derived from human and murine cell lines, and the use of these polynucleotides and polypeptides in a variety of diagnostic and therapeutic applications. Methods, compositions, kits, and devices are also provided for identifying compounds which are inhibitors of agouti activity, and for altering fatty acid synthetase activity and intracellular calcium levels in transformed cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 15 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2002:272761 USPATFULL  
 TITLE: Directed evolution of novel binding proteins  
 INVENTOR(S): Ladner, Robert Charles, Ijamsville, MD, UNITED STATES  
 Guterman, Sonia Kosow, Belmont, MA, UNITED STATES  
 Roberts, Bruce Lindsay, Milford, MA, UNITED STATES  
 Markland, William, Milford, MA, UNITED STATES  
 Ley, Arthur Charles, Newton, MA, UNITED STATES  
 Kent, Rachel Baribault, Boxborough, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002150881	A1	20021017
APPLICATION INFO.:	US 2001-781988	A1	20010214 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-192067, filed on 16 Nov 1998, ABANDONED Continuation of Ser. No. US 1995-415922, filed on 3 Apr 1995, PATENTED Continuation of Ser. No. US 1993-9319, filed on 26 Jan 1993,		

PATENTED Division of Ser. No. US 1991-664989, filed on  
1 Mar 1991, PATENTED Continuation-in-part of Ser. No.  
US 1990-487063, filed on 2 Mar 1990, ABANDONED  
Continuation-in-part of Ser. No. US 1988-240160, filed  
on 2 Sep 1988, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1989-US3731	19890901
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BROWDY AND NEIMARK, P.L.L.C., 624 Ninth Street, N.W., Washington, DC, 20001	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Page(s)	
LINE COUNT:	15696	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 16 OF 25 USPATFULL on STN

ACCESSION NUMBER:	2001:191105	USPATFULL
TITLE:	Agouti polypeptide compositions	
INVENTOR(S):	Woychik, Richard P., Orinda, CA, United States Bultman, Scott J., Lakewood, OH, United States Michaud, Edward J., Kingston, TN, United States	
PATENT ASSIGNEE(S):	UT-Battelle, LLC, Oak Ridge, TN, United States (U.S. corporation)	

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6310034	B1	20011030
APPLICATION INFO.:	US 1998-34088		19980303 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-64385, filed on 21 May 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Kammerer, Elyabik C.		
LEGAL REPRESENTATIVE:	Williams, Morgan & Amerson		
NUMBER OF CLAIMS:	34		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	83 Drawing Figure(s); 41 Drawing Page(s)		
LINE COUNT:	10935		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods and compositions comprising novel agouti polypeptides and the polynucleotides which encode them. Also disclosed are DNA segments encoding these proteins derived from human and murine cell lines, and the use of these polynucleotides and polypeptides in a

variety of diagnostic and therapeutic applications. Methods, compositions, kits, and devices are also provided for identifying compounds which are inhibitors of agouti activity, and for altering fatty acid synthetase activity and intracellular calcium levels in transformed cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 17 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2000:109565 USPATFULL  
TITLE: Peptide library and screening method  
INVENTOR(S): Hart, Charles P., Mountain View, CA, United States  
PATENT ASSIGNEE(S): Affymax Technologies N.V., Curaco, Netherlands  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6107059		20000822
APPLICATION INFO.:	US 1992-876288		19920429 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Campell, Bruce R.		
LEGAL REPRESENTATIVE:	Townsend & Townsend & Crew		
NUMBER OF CLAIMS:	8		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10 Drawing Figure(s); 12 Drawing Page(s)		
LINE COUNT:	2405		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A random peptide library constructed by transforming host cells with a collection of recombinant vectors that encode a fusion protein comprised of a carrier protein fused to a random peptide through a proteolytic cleavage site can be used to identify ligands that bind to a receptor. The screening method results in the formation of a complex comprising the fusion protein bound to a receptor through the random peptide ligand, and the random peptide can easily be identified and analyzed by virtue of the carrier protein and associated proteolytic cleavage site.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 18 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2000:77196 USPATFULL  
TITLE: ShK toxin compositions and methods of use  
INVENTOR(S): Kem, William R., Gainesville, FL, United States  
Pennington, Michael W., Cherry Hill, NJ, United States  
Norton, Raymond S., Ivanhoe, Australia  
Chandy, K. George, Laguna Beach, CA, United States  
Kalman, Katalin, Irvine, CA, United States  
PATENT ASSIGNEE(S): The University of Florida, Gainesville, FL, United States (U.S. corporation)  
Bachem Bioscience, Ing., King of Prussia, PA, United States (U.S. corporation)  
Biomolecular Research Institute, Parkville, Australia (non-U.S. corporation)  
Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6077680		20000620
APPLICATION INFO.:	US 1997-980858		19971126 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-59126P	19961127 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	

PRIMARY EXAMINER: Carlson, Karen Cochrane  
ASSISTANT EXAMINER: Bugaisky, Gabriele E.  
LEGAL REPRESENTATIVE: Williams, Morgan, & Amerson  
NUMBER OF CLAIMS: 42  
EXEMPLARY CLAIM: 4  
NUMBER OF DRAWINGS: 40 Drawing Figure(s); 25 Drawing Page(s)  
LINE COUNT: 5831

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods and compositions comprising DNA segments, and proteins derived from sea anemone species. More particularly, it concerns the novel ShK toxin, ShK toxin analogs, chemically-modified toxin analogs, and nucleic acid segments encoding the ShK toxin from Stichodactyla helianthus. Various methods for making and using these DNA segments, DNA segments encoding synthetically-modified ShK toxins, and native and synthetic ShK peptides are disclosed, such as, for example, the use of DNA segments as diagnostic probes and templates for protein production, and the use of proteins, fusion protein carriers and peptides in various immunological and diagnostic applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 19 OF 25 USPATFULL on STN

ACCESSION NUMBER: 1999:36903 USPATFULL  
TITLE: Method of obtaining small conformationally rigid conopeptides  
INVENTOR(S): Olivera, Baldomero M., Salt Lake City, UT, United States  
Hillyard, David R., Holiday, UT, United States  
Myers, Richard A., Salt Lake City, UT, United States  
Scott, Jamie K., Columbia, MO, United States  
Smith, George P., Columbia, MO, United States  
PATENT ASSIGNEE(S): University of Utah, Salt Lake City, UT, United States (U.S. corporation)  
The Curators of the University of Missouri, Columbia, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5885780		19990323
APPLICATION INFO.:	US 1991-733095		19910719 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Scheiner, Laurie		
LEGAL REPRESENTATIVE:	Thorpe, North & Western, L.L.P.		
NUMBER OF CLAIMS:	21		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 3 Drawing Page(s)		
LINE COUNT:	1170		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for separating, identifying and purifying small, conotoxin-like rigidly conformed peptides ("conopeptides") containing multiple Cys residues comprises forming a conoeffector library, each member of which has a nucleic acid encoding a potential conopeptide sequence. The conoeffectors are expressed such that they are exposed on the surface of a bacteriophage. These bacteriophage are screened for binding to a target protein molecule, and receptors in particular, to separate and bind phage having affinity for the target protein. Reiterative screening, if required, is used to enrich and yield a phage carrying the bound conopeptide of the desired specificity and affinity. The enriched phage are then subjected to DNA sequencing to determine the conopeptide sequence including the position of the Cys residues. The chemical structure information gathered, coupled with the binding specificities to the target protein, permits the genetic or synthetic preparation of a large variety of small rigidly conformed **disulfide** rich peptides as pharmaceutical, pesticidal or other bioactive candidates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 20 OF 25 USPATFULL on STN

ACCESSION NUMBER: 97:1540 USPATFULL  
TITLE: Omega-conotoxin peptides  
INVENTOR(S): Olivera, Baldomero M., Salt Lake City, UT, United States  
Hillyard, David R., Salt Lake City, UT, United States  
Imperial, Julita S., Salt Lake City, UT, United States  
Monje, Virginia D., Quezon City, Philippines  
PATENT ASSIGNEE(S): The University of Utah, Salt Lake City, UT, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5591821		19970107
APPLICATION INFO.:	US 1993-92215		19930716 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Weimar, Elizabeth C.		
ASSISTANT EXAMINER:	Marshall, S. G.		
LEGAL REPRESENTATIVE:	Venable, Baetjer, Howard & Civiletti, LLP		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 3 Drawing Page(s)		
LINE COUNT:	1557		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to  $\omega$ -conotoxin peptides having 24-30 amino acids, six cysteines which form **disulfide** bonds between the first and fourth, second and fifth, and third and sixth cysteines, respectively, and an internal sequence of Cys-Arg-Lys-Thr-Xaa.sub.1 -Tyr-Xaa.sub.2 -Cys-Cys-Ser-Gly-Ser-Cys (SEQ ID NO:1). The invention is further directed to  $\omega$ -conotoxin peptides of the generic formula Cys-Xaa.sub.1 -Gly-Xaa.sub.2 -Gly-Ala-Xaa.sub.3 -Cys-Arg-Lys-Thr-Xaa.sub.4 -Tyr-Xaa.sub.5 -Cys-Cys-Ser-Gly-Ser-Cys-Xaa.sub.6 -Arg-Gly-Xaa.sub.7 -Cys (SEQ ID NO:2). Preferably, the C-terminus is amidated. These peptides also contain three **disulfide** bonds. Examples of  $\omega$ -conotoxin peptides within the generic formula are MVIIC having the formula Cys-Cys-Gly-Lys-Gly-Ala-Xaa.sub.1 -Cys-Arg-Lys-Thr-Xaa.sub.2 -Tyr-Asp-Cys-Cys-Ser-Gly-Ser-Cys-Gly-Arg-Arg-Gly-Lys-Cys (SEQ ID NO:3), wherein Xaa is preferably Pro or Hyp (4-hydroxyproline) and Xaa.sub.2 is preferably Met or Nle (norleucine) and wherein preferably the C-terminus is amidated, and MVIID having the formula Cys-Gln-Gly-Arg-Gly-Ala-Ser-Cys-Arg-Lys-Thr-Xaa-Tyr-Asn-Cys-Cys-Ser-Gly-Ser-Cys-Asn-Arg-Gly-Arg-Cys (SEQ ID NO:4), wherein Xaa is preferably Met or Nle (norleucine), and wherein preferably the C-terminus is amidated. These peptides target the P-like subtypes of Ca.sup.2+ channels as well as the N-type Ca.sup.2+ channels.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 21 OF 25 USPATFULL on STN

ACCESSION NUMBER: 96:101466 USPATFULL  
TITLE: Directed evolution of novel binding proteins  
INVENTOR(S): Ladner, Robert C., Ijamsville, MD, United States  
Guterman, Sonia K., Belmont, MA, United States  
Roberts, Bruce L., Milford, MA, United States  
Markland, William, Milford, MA, United States  
Ley, Arthur C., Newton, MA, United States  
Kent, Rachel B., Boxborough, MA, United States  
PATENT ASSIGNEE(S): Protein Engineering Corporation, Cambridge, MA, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5571698 19961105  
APPLICATION INFO.: US 1993-57667 19930618 (8)  
DISCLAIMER DATE: 20100629  
RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-664989, filed on 1 Mar 1991, now patented, Pat. No. US 5223409 which is a continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, now abandoned

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Ulm, John  
LEGAL REPRESENTATIVE: Cooper, Iver P.  
NUMBER OF CLAIMS: 83  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 16 Drawing Page(s)  
LINE COUNT: 15323

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 22 OF 25 USPATFULL on STN  
ACCESSION NUMBER: 95:62572 USPATFULL  
TITLE: Peptide library and screening systems  
INVENTOR(S): Dower, William J., Menlo Park, CA, United States  
Cwirla, Steven E., Palo Alto, CA, United States  
Barrett, Ronald W., Sunnyvale, CA, United States  
PATENT ASSIGNEE(S): Affymax Technologies N.V., Netherlands (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5432018		19950711
APPLICATION INFO.:	US 1991-718577		19910620 (7)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1990-541108, filed on 20 Jun 1990		

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Scheiner, Toni R.  
ASSISTANT EXAMINER: Wortman, Donna C.  
LEGAL REPRESENTATIVE: Townsend and Townsend Khourie and Crew  
NUMBER OF CLAIMS: 12  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 7 Drawing Page(s)  
LINE COUNT: 1739

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Peptides which bind to selected receptors are identified by screening libraries which encode a random or controlled collection of amino acids. Peptides encoded by the libraries are expressed as fusion proteins of

bacteriophage coat proteins, and bacteriophage are then screened against the receptors of interest. Peptides having a wide variety of uses, such as therapeutic or diagnostic reagents, may thus be identified without any prior information on the structure of the expected ligand or receptor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 23 OF 25 USPATFULL on STN

ACCESSION NUMBER: 95:29292 USPATFULL

TITLE: Viruses expressing chimeric binding proteins

INVENTOR(S): Ladner, Robert C., Ijamsville, MD, United States

Guterman, Sonia K., Belmont, MA, United States

Roberts, Bruce L., Milford, MA, United States

Markland, William, Milford, MA, United States

Ley, Arthur C., Newton, MA, United States

Kent, Rachel B., Boxborough, MA, United States

PATENT ASSIGNEE(S): Protein Engineering Corporation, Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5403484		19950404
APPLICATION INFO.:	US 1993-9319		19930126 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1991-664989, filed on 1 Mar 1991, now patented, Pat. No. US 5223409 which is a continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1989-3731	19890901
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Hill, Jr., Robert J.	
ASSISTANT EXAMINER:	Ulm, John D.	
LEGAL REPRESENTATIVE:	Cooper, Iver P.	
NUMBER OF CLAIMS:	49	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 16 Drawing Page(s)	
LINE COUNT:	14368	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 24 OF 25 USPATFULL on STN

ACCESSION NUMBER: 93:52487 USPATFULL

TITLE: Directed evolution of novel binding proteins  
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PATENT INFORMATION:	US 5223409		19930629
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RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, now abandoned And a continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Hill, Jr., Robert J.		
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LEGAL REPRESENTATIVE:	Cooper, Iver P.		
NUMBER OF CLAIMS:	66		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 16 Drawing Page(s)		
LINE COUNT:	15410		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L182 ANSWER 25 OF 25 USPAT2 on STN  
 ACCESSION NUMBER: 2002:273335 USPAT2  
 TITLE: Agouti polynucleotide compositions and methods of use  
 INVENTOR(S): Woychik, Richard P., Orinda, CA, United States  
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	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6514747	B2	20030204
APPLICATION INFO.:	US 2001-781811		20010212 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-34088, filed on 3 Mar 1998, now patented, Pat. No. US 6310034, issued on 30 Oct 2001 Continuation-in-part of Ser. No. US 1993-64385, filed on 21 May 1993, now abandoned		
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PRIMARY EXAMINER: Kemmerer, Elizabeth  
LEGAL REPRESENTATIVE: Akerman, Senterfitt & Eidson, P.A.  
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NUMBER OF DRAWINGS: 83 Drawing Figure(s); 41 Drawing Page(s)  
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods and compositions comprising novel agouti polypeptides and the polynucleotides which encode them. Also disclosed are DNA segments encoding these proteins derived from human and murine cell lines, and the use of these polynucleotides and polypeptides in a variety of diagnostic and therapeutic applications. Methods, compositions, kits, and devices are also provided for identifying compounds which are inhibitors of agouti activity, and for altering fatty acid synthetase activity and intracellular calcium levels in transformed cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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